

www.mass.gov/nhesp

Massachusetts Division of Fisheries & Wildlife

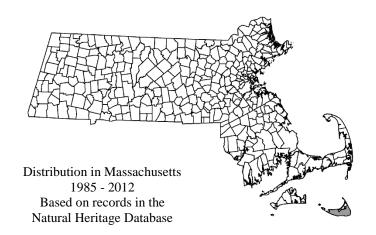
# **Purple Cudweed** Gamochaeta purpurea

(L.) Cabrera

State Status: Endangered Federal Status: None

**DESCRIPTION:** Purple Cudweed is an annual member of the Aster family (Asteraceae) that colonizes open, disturbed habitats, growing to a height of 0.1 to 0.5 m. Both the stem and leaves of Purple Cudweed are coated with matted white hairs, giving the plant a woolly or cob-webbed appearance. The grayish-green stem is usually erect and unbranched, with a basal rosette and alternate leaves along the stem. Crowded clusters of white to brownish flowers form in the upper leaf axils, surrounded by pink or purple bracts.

**AIDS TO IDENTIFICATION:** The leaves of Purple Cudweed are distinctly bicolored, appearing woolly and white below, and grayish-green above, with the upper surfaces either hairless or sparsely covered in a cob-web of fine hairs. The leaves are spatulate or oblanceolate (tapering to the base), often with a sharp tip. The basal and lower leaves tend to wither before the flowers develop. The capitulescence (arrangement of the inflorescence) is usually continuous, and the receptacle is only shallowly concave. The outer involucral bracts are oval to triangular with pointed tips; the inner bracts are also pointed, and 3.5 to 5 mm long. They appear purplish in bud, and whitish or silvery during fruiting.





Purple Cudweed has a wooly appearance, with crowded clusters of flowers in the upper leaf axils. Photo by Robert H. Mohlenbrock @ USDA-NRCS PLANTS Database / USDA SCS. 1991. Southern wetland flora: Field office guide to plant species. South National Technical Center, Fort Worth.

**SIMILAR SPECIES:** In Purple Cudweed, the basal cells of hairs on the upper surface of the leaves are expanded and glassy, a diagnostic feature that distinguishes this plant from most similar species, which have hairs that are thin and thread-like to the base. The related Pennsylvania Cudweed (G. pensylvanica) is also found in Massachusetts, but its leaves are only weakly bicolored, and obovate or spatulate, without pointed tips. The capitulescence of Pennsylvania Cudweed is usually

A Species of Greatest Conservation Need in the Massachusetts State Wildlife Action Plan

# Massachusetts Division of Fisheries & Wildlife

1 Rabbit Hill Rd., Westborough, MA; tel: 508-389-6300; fax: 508-389-7890; www.mass.gov/dfw

Please allow the Natural Heritage & Endangered Species Program to continue to conserve the biodiversity of Massachusetts with a contribution for 'endangered wildlife conservation' on your state income tax form, as these donations comprise a significant portion of our operating budget. www.mass.gov/nhesp

interrupted, with a deeply concave receptacle. Its inner involucral bracts are only 3 to 3.5 mm long, and are not pointed.

### POPULATION STATUS IN MASSACHUSETTS:

Purple Cudweed is listed under the Massachusetts Endangered Species Act as Endangered. All listed species are protected from killing, collecting, possessing, or sale, and from activities that would destroy habitat and thus directly or indirectly cause mortality or disrupt critical behaviors. Purple Cudweed is currently known only from Nantucket County. It was found historically in Barnstable, Bristol, Dukes, and Middlesex Counties.

RANGE: Purple Cudweed has a highly restricted range in Massachusetts and is rare in many states in the Northeast. It is more common elsewhere, occurring across the eastern half of the United States and appearing, likely as a naturalized species, in the coastal and mountain West. It is found north into Ontario and British Columbia, and south into Mexico, Nicaragua, the West Indies, and South America. It has naturalized over much of the globe, including in Hawaii, New Zealand, Australia, and parts of East Africa.

**HABITAT:** This species colonizes open, usually disturbed habitats, including roadsides, fields, woodland clearings and forest edges. It is found in Massachusetts in sandy habitats of the coastal plain, including pond shores, seasonally wet meadows, and sandplains.

#### THREATS AND MANAGEMENT

**RECOMMENDATIONS:** Sites supporting Purple Cudweed should be monitored for invasions of exotic plants; if they are out-competing this species, a plan should be developed, in consultation with the Massachusetts Natural Heritage & Endangered Species Program, to remove them. Known habitat locations should be protected from dramatic changes in light or moisture conditions. Locations that receive heavy recreational use should be carefully monitored for damage to Purple Cudweed or soil disturbance. If needed, trails should be re-routed to protect a population. All active management of state-listed plant populations (including invasive species removal) is subject to review under the Massachusetts Endangered Species Act, and should be planned in close consultation with the Massachusetts Natural Heritage & Endangered Species Program.



Illustration by: Grace Barber

## **Fruiting in Massachusetts**

Jan		Feb		Mar		Apr		May		Jun		Jul		Aug		Sep		Oct		Nov		Dec	

#### **REFERENCES:**

Flora of North America Editorial Committee, eds. 2008. Asteraceae. *Flora of North America North of Mexico*, Vols. 19-21. Oxford University Press, NY.

Haines, A. 2011. Flora Novae Angliae – a Manual for the Identification of Native and Naturalized Higher Vascular Plants of New England. New England Wildflower Society, Yale Univ. Press, New Haven, CT.

Nesom, G.L. 1990. Taxonomic status of *Gamochaeta* (Asteraceae: Inuleae) and the species of the United States. *Phytologia* 68: 186–198.

University of California, Integrated Pest Management. 2011. "Purple Cudweed."

http://www.ipm.ucdavis.edu/PMG/WEEDS/purple\_cud\_weed.html

USDA SCS. 1991. Southern Wetland Flora: Field Office Guide to Plant Species. South National Technical Center, Fort Worth, TX.

Updated 2015

#### A Species of Greatest Conservation Need in the Massachusetts State Wildlife Action Plan